## STRUCTURAL COLLAPSE OPERATIONS **OBJECTIVES**

30-1	identify the destructive forces that may be placed on structure. (3-3.5a)				
50-2	Identify the properties of materials used in building construction. (3-3.3a)				
50-3	Identify major fundamentals of structural design. (3-3.3a)				
50-4	Identify types of building construction. (3-3.3a)				
	<ul> <li>A. Wood frame (W)</li> <li>B. Light gauge metal (S3)</li> <li>C. Unreinforced masonry (URM)</li> <li>D. Diagonally braced steel frame (S2)</li> <li>E. Concrete frame (C1 and C3)</li> <li>F. Concrete Shearwall (C2)</li> <li>G. Precast concrete frame (PC2)</li> <li>H. Post-tensioned lift slab</li> <li>I. Tilt-up concrete wall (TU)</li> </ul>				
50-5	Identify the different types and characteristics of responses to a structural collapse incident. (3-3.3b)				
	50-5.1 Initial spontaneous response 50-5.2 Planned community response 50-5.3 Void space rescue 50-5.4 Technician level/FEMA/US&R				
50-6	Identify the components of size-up/risk assessment. (3-3.3b)				
50-7	Identify the components of a building assessment (3-3.3b&c)				
	<ul> <li>A. Collapse mechanisms</li> <li>B. Collapse patterns</li> <li>C. Degree of survivability</li> <li>D. Victim accessibility</li> </ul>				

E.

F. G. Prior intelligence

Resources available

Structural condition

50-8 Describe the different marking systems used in structural collapse. (3-3.3b&c) 50-8.1 Building identification 50-8.2 Hazard marking 50-8.3 Search assessment marking 50-8.4 Victim marking 50-9 Describe stages of search and rescue planning. (3-3.3) 50-10 Identify hazards associated with structural collapse incidents. (3-3.3a) 50-10.1 Risk assessment components 50-10.2 Safety planning 50-11 Identify five categories of tools and their uses. (3-3.3d) 50-12 Identify various shoring systems and their applications (303.3e) 50-12.1 Identify the function and need of rescue shoring 50-12.2 Identify the building, construction and loads to be supported 50-12.3 Identify the capacities and configuration of rescue shoring 50-12.4 Identify the type of shoring commonly used A. Cribbing Window/Door shoring B. T-Spot shoring C. Vertical shore D. Laced Post shore E. F. Sloped floor shore G. Raker shore H. Horizontal shore Mechanical and Pneumatic shore I.

50-13 Identify the need for victim assessment, care and packaging. (3-3.3d)

- 50-14 Given a summary of five categories of tools and their uses, the student shall identify and demonstrate their uses with 100% proficiency.
- 50-15 Given a summary of types of shoring, the student shall identify and demonstrate constructing the following with 100% proficiency.
  - A. Cribbing
  - B. Window/Door shoring
  - C. T-Spot shoring
  - D. Vertical shore
  - E. Laced Post shore
  - F. Sloped floor shore
  - G. Raker shore
  - H. Horizontal shore
  - I. Mechanical and Pneumatic shore
- 50-16 Given a summary of victim assessment, care and packaging, the student shall demonstrate care and packaging a victim with 100% proficiency.

( ) Indicates reference to NFPA 1670

**"BOLD"** Indicates a practical objective that is included in the practical section of the instructors guide